Amendments to the Specification:

Please make the following amendments to the specification:

On page 2, please amend the first paragraph as follows:

Commonly used position sensitive detectors for fast neutron radiography utilise charge coupled devices (CCDs) and scintillators as imaging tools. There are problems associated with both of these detection elements. The most widely used methods for fast neutron detection currently depend on the elastic scattering of protons and the subsequent conversion of the proton energy into a number of electrons. In turn these are often converted into light ~~be~~ by means of a scintillator material. Transduction of this light into an electrical signal is accomplished using a CCD.

On page 2, please amend the third paragraph as follows:

The primary efficiency of the scintillator detector can be defined as the ratio of the total number of neutrons that interact with the screen, to the number of neutrons that are incident on it. Defined in this way the primary efficiency ε_p is:

$$\varepsilon_p = (1 - \exp^{-N\sigma d})$$

where N is the density of hydrogen atoms, σ is the cross section and d is the thickness of the screen. ~~Figure 1 shows the efficiency of a screen as a function of its thickness for a number of common hydrogen containing materials at a cross-section of 1.1 barns for 8 MeV neutrons.~~

On page 4, please amend the third paragraph as follows:

As noted above, thermal neutron radiography is used currently as a non destructive testing and imaging method. Of particular relevance to the present invention is the recent demonstration that microchannel plate (MCP) detectors are capable of imaging cold and thermal neutrons (W.B. Feller, R.G. Downing, and P.L. White, "Neutron Field Imaging with Microchannel Plates", Proc SPIE 4141 (2000) 291, and R.G. Downing *et al.*, "High Resolution Imaging of Low-Energy Neutrons with Microchannel Plates", Trans. Amer. Nucl. Soc., 82 (2000) 83). The key to the detection process is the use of specially prepared, boron enriched MCPs, an approach that was originally predicted by Fraser and Pearson at the University of Leicester (G.W. Fraser and J.F. Pearson, "The Direct Detection of Thermal Neutrons by Imaging Microchannel Plate Detectors", Nucl. Instr. Meth. A293 (1990) 569).